



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,550	07/20/2004	Daniel C. Fosbinder	ITW7510.087	4549

33647 7590 01/09/2007
ZIOLKOWSKI PATENT SOLUTIONS GROUP, SC (ITW)
136 S WISCONSIN ST
PORT WASHINGTON, WI 53074

EXAMINER

SHAW, CLIFFORD C

ART UNIT	PAPER NUMBER
----------	--------------

1725

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/710,550

Applicant(s)

FOSBINDER, DANIEL C.

Examiner

Clifford C. Shaw

Art Unit

1725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 0720.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

Detailed Action

1.) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2.) Claims 1-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geng et al. (2001/0035399). Figure 1 and the discussion at paragraphs 37 through 47 in Geng et al. (2001/0035399) disclose a method and arrangement for initiating a welding process having features claimed, including: selecting an arc starting duration at element 26 for a first V/A output (i.e., CC); selecting a desired V/A output for welding (i.e., CV); "soft switching" or tapering between one V/A characteristic and the other as discussed in paragraphs 41 and 42; and using a microprocessor as part of the power supply control (see paragraph 46). Independent claims 1, 14, 23, and 29 differ from Geng et al. (2001/0035399) in calling for the selected V/A output to be "greater than", "above", or boosted over the desired V/A output and claim 14 further differs in calling for a computer program on a storage medium. The dependent claims differ in calling for stick welding and for various operating parameters. These differences do not patentably distinguish over the prior art. Although the Geng et al. (2001/0035399) publication does not explicitly use the terminology "greater than" or "above" or "boosted" to compare the constant-current starting V/A characteristic with the constant-voltage welding characteristic, the publication does teach that the starting arc current should be higher than the current during

Art Unit: 1725

constant voltage welding mode. It is considered obvious that this higher current during the start phase of the system of Geng et al. (2001/0035399) constitutes a "greater" or "boosted" V/A characteristic simply because the starting characteristic has at least one parameter (current) that is greater than the welding characteristic, thereby satisfying the claim language. In regard to claim 14, the Geng et al. (2001/0035399) publication teaches that a microprocessor can be used to implement the power supply control that is taught (see paragraph 46). It is considered obvious that at the time applicant's invention was made, the programming used for this implementation could have been placed on a readable medium as claimed because this is a conventional technique for loading a control program onto a microprocessor. In regard to the claim limitations directed to stick welding, in paragraph 47, the publication teaches that his "... new type of power supply may be used for many applications other than Gas Metal Arc welding and so the power supply disclosed herein is in no way limited to any one particular application". On the basis of this teaching, it would have been obvious to have used the arc initiation approach taught in Geng et al. (2001/0035399) in any conventional welding technique, including stick welding. It would have been obvious to have tuned the system of Geng et al. (2001/0035399) to correspond to the parameter values in the dependent claims, the motivation being to adjust the system for optimal performance for a given welding problem.

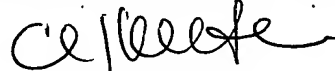
Any inquiry concerning this communication should be directed to Clifford C Shaw at telephone number 571-272-1182. The examiner can normally be reached on Monday through

Art Unit: 1725

Friday of the first week of the pay period and on Tuesday through Friday of the second week of the pay period.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Patrick J. Ryan, can be reached at 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Clifford C Shaw
Primary Examiner
Art Unit 1725

January 4, 2007